

Abstract

In accordance with the present invention, a land-based cable station is provided for an undersea optical transmission system. The cable station includes submarine line terminal equipment (SLTE) for processing terrestrial traffic received from an external source, power feed equipment for supplying electrical power to active undersea components of the transmission system, an element management system for configuring and obtaining status information from the transmission system, and a cable termination box in which an undersea cable terminates. The SLTE includes terrestrial optical transmission equipment receiving the terrestrial traffic and generating optical signals in response thereto. The SLTE also includes an interface device providing signal conditioning to the optical signals received from the terrestrial optical transmission equipment so that the optical signals are suitable for transmission through the undersea optical transmission system.